

Bruhat Bangalore Mahanagara Palike

Name of Work : Construction of compound wall to Govt School at 707SFS 4th phase yelahanka new town in ward no - 03 of Yelahanka Satellite town sub division

Estimate Cost 4000000

Sl No	Description of Item	Measurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer-in-charge. In lime mortar (PWD SR 2021-22 Vol -2 Pg 163 item No. 19.7.3)								
	Existing Compound wall	Sqm	1	52.70		1.45	76.415		
								789.00	
	Basic rate							78.9	
	Area weightage 10%						76.42	867.9	66320.58
	Total								
2	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking to the appropriate disposal area as per direction of Engineer-in-charge.Dismantal (PWD SR 2021-22 Vol -I Pg 165 item No. 19.19)								
	Existing Gate	Kg	1	5.30		1.50	238.5		
								2.00	
	Basic rate							0.2	
	Area weightage 10%						238.50	2.2	524.70
	Total	30							
3	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3 m (PWD SR 2021-22 Vol -I Pg 5 item No. 1.4.2)								
	Footing	Cum	62	1.10	1.1	1.50	112.53		
	SSM								
	Longer Direction	Cum	1	77.1	0.75	0.9	52.0425		
		Cum	1	57.0	0.75	0.9	38.475		
	Shorter Direction	Cum	1	55.70	0.75	0.9	37.5975		
		Cum	1	52.70	0.75	0.9	35.5725		
	Drain								
		Cum	1	52.70	0.95	0.9	45.0585		
	Basic rate							199.00	
	Area weightage 10%							19.9	
	Total						321.28	218.9	70327.32
4	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. (PWD SR 2021-22 Vol -I Pg No 5 item no 1.4.1)								
	Debris Removal								
	School Surrounding								
	RHS	Cum	1	100.00	3.30	0.45	148.50		
	LHS	Cum	1	114.00	4.00	0.50	228.00		
								186.00	
	Basic rate							18.60	
	Area weightage 10%						376.50	204.60	77032.00
	Total								

Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. (PWD SR 2021-22 Vol -2 CORRIGENDA, item No. 6.4)

Footings	Cum	62.00	1.10	1.10	0.30	0.726		
Longer Direction	Cum	1	77.1	0.75	0.30	17.3475		
	Cum	1	57.0	0.75	0.30	12.825		
Shorter Direction	Cum	1	55.70	0.75	0.30	12.5325		
	Cum	1	52.70	0.75	0.30	11.8575		
							2561.00	
Basic rate							256.10	
Area weightage 10%								
Total						55.29	2817.10	155753.23

- 6 Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates. Specification (PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)

For Footing	Cum	62	1.10	1.10	0.15	11.25		
Longer Direction	Cum	1	77.1	0.75	0.15	8.67375		
	Cum	1	57.0	0.75	0.15	6.4125		
Shorter Direction	Cum	1	55.70	0.75	0.15	6.26625		
	Cum	1	52.70	0.75	0.15	5.92875		
Drain	Cum	1	52.70	0.95	0.15	7.50975		
Cobble Stone	Cum	1	14.20	3.00	0.15	6.39		
	Cum	1	10	4.00	0.15	6		
							5554.00	
Basic rate							555.4	
Area weightage 10%								
Total						58.43	6109.4	356996.68

- 7 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. ((PWD SR 2021-22 Vol- 1 P.No -7 / L.No -1.9)

Filling Available of Excavated Earth								
Earth Work Excavation	Cum					774.19		
PCC	Cum					-46.04		
Filling in foundation with granite / trap broken metal	Cum					-55.29		
Footing Concrete Quantity	Cum					-25.11		
							204.00	
Basic rate							20.40	
Area weightage 10%								
Total						647.75	224.40	145354.76

- 8 Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1A)

Excavated Earth	Cum					774.19		
Filling Available of Excavated Earth						-647.75		
							118.00	
Basic rate							11.80	
Area weightage 10%								
Total						126.44	129.80	16412.24

- 9 Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4A)

Qty frm Item No-7	t.Km		126.44		1.280	161.85		
							12.00	
Basic rate							96.00	
8Km 12*8								

	Area weightage 10%							9.60	
	Total						161.85	105.60	17090.98
10	Providing and laying in position Reinforced cement concrete for all Sub structures of building , Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.4.3 of PWD SR 2021-22)								
	For Footing								
	Footing	Cum	62.00	1.10	1.10	0.30	22.51		
	Column	Cum	62.00	0.20	0.20	1.05	2.60		
	Plinth Beam for Compound Wall	Cum	2.00	55.70	0.20	0.20	4.46		
		Cum	2.00	76.90	0.20	0.20	6.15		
	Drain Bottom Raft	Cum	1.00	52.70	0.90	0.15	7.11		
	Drain Side Wall	Cum	2.00	52.70	0.15	0.60	9.49		
	Basic rate							5992.00	
	Add 8% For Shuttering							479.36	
	Sub Total							6471.36	
	Area weightage 10%							647.14	
	Total						52.32	7118.50	372429.03
11	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.5.2 of PWD SR 2021-22)								
	Column above Ground Level	Cum	62.00	0.20	0.20	1.80	4.46		
	Basic rate							6186.00	
	Add 10% For Shuttering							618.60	
	Sub Total							6804.60	
	Area weightage 10%							680.46	
	Total						4.46	7485.06	33413.31
12	Providing Thermo-Mechanically Treated bars of grade Fe-500D or more Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members wherever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately). (PWD SR 2021-22 Vol -II Pg 84 item no 11.32)								
	Footing	Cum					22.51		
		Kg	Steel assumed 100 Kg/Cum of				2250.60		
	Column	Cum					7.07		
		Kg	Steel assumed 200 Kg/Cum of				1413.60		
	Beam	Cum					10.61		
		Kg	Steel assumed 150 Kg/Cum of				1591.20		
	For Drain	Cum					16.60		
		kg	Steel assumed 60Kg/Cum of				996.03		
	Basic rate							96.00	
	Area weightage 10%							9.60	
	Total						6251.43	105.60	660151.01

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Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m³ and minimum compressive strength of 4.00 N/mm² conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.(PWD SR 2021-22 Vol - 2 Pg 17 item no. 6.33)

New Compound Wall								
	Sqm	1	77.1		1.80	138.78		
	Sqm	1	57		1.80	102.60		
	Sqm	1	55.7		1.80	100.26		
	Sqm	1	52.7		1.80	94.86		
Deduction								
Gate	Sqm	-2	5.3		1.45	-15.37		
Basic rate							1061.00	
Area weightage 10%							106.1	
Total						421.13	1167.1	491500.82

- 14 Fabricating, providing and erecting in position Hot dip galvanised Gate. Using 72 X 72 X 4.8mm Sq. GI Pipe Frame with Top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile, 20mm hot dip galvanised sq. rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq. rods and heads at top, middle and bottom. Intermediate supports of 75X12 mm and 50X6 mm arch bend to hot dip galvanised flats. The work is inclusive of throughing GI flat GI sq. rods, placing, welding all the joints including grinding, finishing metal putty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq. pipe, GI sq. rods, GI forged designs etc., heavy duty hinges are made out of 75mm solid sq. block assembled with 20mm dia bearing in three places for each flop. Heavy Duty Locking arrangements at tow places including cost of labour, painting, erecting charges using hoist pulley cranes with all lead and lift, loading, transportation, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the Engineer-in-charge of the work. (Data Rate)

New Gate	Sqm	2	5.3		2.00	21.20		
Data Rate							12475.00	
Total						21.20	12475.00	264470.00

- 15 "Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge (Vol 2/ P No-41/ I no- 8.3.1 of PWD SR 2021-22) "

New Compound Wall								
	Sqm	2.00	77.10		1.80	277.56		
	Sqm	2.00	57.00		1.80	205.20		
	Sqm	2.00	55.70		1.80	200.52		
	Sqm	2.00	52.70		1.80	189.72		
Deduction								
Gate	Sqm	-4.00	5.30		1.45	-15.37		
Compound wall Top Surface	Sqm	1.00	247.80		0.15	37.17		
Basic rate							299.00	
Area weightage 10%							29.9	
Total						894.80	328.9	294299.72

- 16 Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two coats applied @ 1.43 ltr/10 m² over and including priming coat of exterior primer applied @ 2.20 kg/10 m²) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge..(PWD SR 2021-22 Vol -II Pg 46 item no 8.31)

Compound Wall								
	Sqm	2.00	77.10		1.80	277.56		
	Sqm	2.00	57.00		1.80	205.20		

	Sqm	2.00	55.70		1.80	200.52		
	Sqm	2.00	52.70		1.80	189.72		
Deduction								
Gate	Sqm	-4.00	5.30		1.45	-15.37		
Compound wall Top Surface	Sqm	1.00	247.80		0.15	37.17		
							132.00	
Basic rate							13.2	
Area weightage 10%						894.80	145.2	129924.96
Total								
17	Providing and placing on terrace(at all floor levels), polyethylene water storage tanks as per IS 12701 marked,with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank(For 1000 litre capacity) (PWD SR 2021-22 1st Corrigenda Vol II.SI No.12.Item No 13.34).							
	Tank							
	Its	2000				2000.00		
							8.00	
Basic rate							0.80	
Area weightage 10%						2000.00	8.80	17600.00
Total								
18	Supply and delivery of Centrifugal pumpset at site brand new best make and with discharge duty confirming to ISI standards and its latest amendments 2 HP, Size 50x40 Head 22M, Discharge 186 LPM . (PWD SR 2021-22 Vol V Pg. no. 164 Item No 46.2)							
	Motor	Each	1			1		
Basic rate							17470	
Total						1.00	17470	17470.00
19	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of all materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete. (Data Rate)							
	Sqm	1	52.70	0.90		47.43		
Data rate							2072.00	
Total						47.43	2072.00	98275.00
20	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications. (PWD SR 2021-22 Vol II Pg no 64 Item No 9.32)							
	Sqm	1.00	14.20	3.00		42.60		
	Sqm	1.00	10.00	4.00		40.00		
Basic rate							1145.00	
Area weightage 10%							114.50	
Total						82.60	1259.50	104035.00

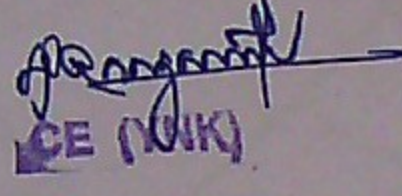
							Total Amount	3389381.34
							GST Charges (18% of estimated cost)	610088.64
							Miscellaneous and rounding	530.02
							Total Amount	4000000.00

CERTIFICATE:

- 1) The work spot has been inspected and found to be necessary
- 2) The work spot comes under B.B.M.P
- 3) The provisions made in the estimate are necessary and minimum.
- 4) The estimate is based on S.R of 2021-2022, Data Rates, Issued Rates and Corrigenda 1 & 2.

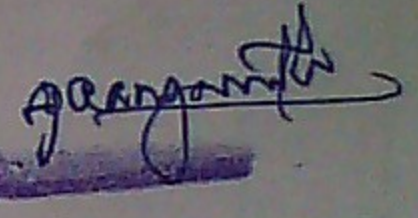
Administrative Approval

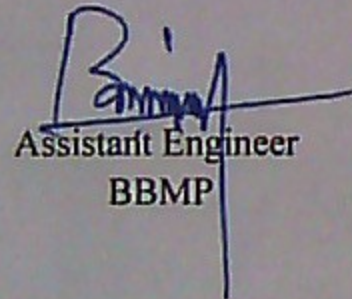
Accorded For 40.00 Lacs.
Head of A/C P-372.6
CER NO : 62 Dt. 22/8/22

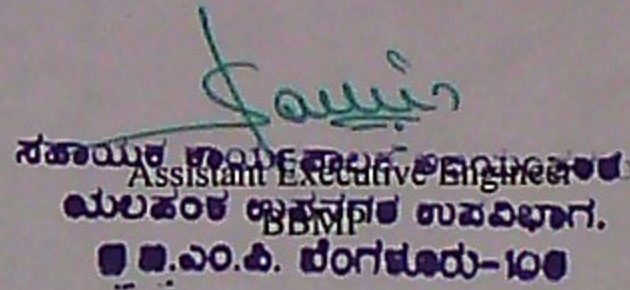
 
TA CE (NKK)

Technical Sanction

Accorded For 40.00 Lacs.
Head of A/C P-372.6
CER NO : 79 Dt. 22/8/22

 
TA CE (NKK)


Assistant Engineer
BBMP


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ಯಲಹಂಕ ಜಲಸಂಪನ್ಮೂಲ ಸಚಿವಾಲಯ.
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Executive Engineer
BBMP